Client Ref.: 60194 US

DIENE FUNCTIONALIZED CATALYST SUPPORTS AND SUPPORTED CATALYST COMPOSITIONS

PRIOR RELATED APPLICATIONS

[1] This application claims priority to prior foreign application in Venezula No. 2200-01, filed October 18, 2001, which claims priority to U.S. provisional patent application Serial No. 60/241,969, filed on October 20, 2000.

FEDERALLY SPONSORED RESEARCH STATEMENT

[2] Not applicable.

REFERENCE TO MICROFICHE APPENDIX

[3] Not applicable.

FIELD OF THE INVENTION

[4] The present invention relates to functionalized catalyst supports that are useful in the formation of supported polymerization catalysts. The present invention further relates to supported catalysts obtainable using such functionalized catalyst supports, which supported catalysts are particularly adapted for use in a polymerization process wherein at least one polymerizable olefin monomer is contacted with the supported catalyst under polymerization conditions to form a polymeric product. The present invention further pertains to methods for making such functionalized catalyst supports and supported catalysts. The present invention further pertains to polymerization processes utilizing such supported catalysts.

BACKGROUND OF THE INVENTION

[5] It is previously known in the art to activate Ziegler-Natta polymerization catalysts, particularly such catalysts comprising Group 3-10 metal complexes containing delocalized π -bonded ligand groups, by the use of an activator. Generally in the absence of such an activator compound, also referred to as a cocatalyst, little or no polymerization activity is observed. A class of suitable activators are aluminoxanes, or alkylaluminoxanes, which are generally believed to be oligomeric or polymeric alkylaluminoxy compounds, including cyclic oligomers. Generally such compounds contain, on average about 1.5 alkyl groups per aluminum atom, and are prepared by reaction of trialkylaluminum compounds or mixtures of compounds